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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,843	03/01/2007	Tsutomu Ikeda	06101	2009
23338 7590 07/01/2010 DENNISON, SCHULTZ & MACDONALD 1727 KING STREET SUITE 105 ALEXANDRIA, VA 22314				
EXAMINER				
AURORA, REENA				
ART UNIT		PAPER NUMBER		
2858				
MAIL DATE		DELIVERY MODE		
07/01/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/587,843

Applicant(s)

IKEDA ET AL.

Examiner

Reena Aurora

Art Unit

2858

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 14 and 18 - 21 is/are pending in the application.
- 4a) Of the above claim(s) 15 - 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 4, 10 - 11 and 18 - 21 is/are rejected.
- 7) ☒ Claim(s) 5 - 9 and 12 - 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/28/06, 12/17/08, 8/31/09
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 15 and 16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 03/30/2010.

Applicant's election without traverse of claims 1 – 14 and 18 - 21 in the reply filed on 03/30/2010 is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 4, 10 – 11 and 18 - 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hagio et al. (2002/0130656).

As to claim 1, Hagio et al. (hereinafter Hagio) discloses a rotation angle detector comprising a magnetic detector (95, fig. 13, 14) for detecting a rotational angle of a rotor (94) based on a magnetic field generated between a pair of magnets (99) respectively disposed across the rotational axis of the rotor (94) and having a connection terminal (96); main terminal (97) having a connection portion connected with the connection terminal (96) of the magnetic detector (95); and a holder member (65, fig. 9, 100, fig. 15) for holding the magnetic detector (95) and the connection portion of the main

terminal (97), wherein the magnetic detector (95), the main terminal (97) and the holder member (100) are structured as a sensor assembly.

As to claim 18, Hagio discloses a rotation angle detector comprising a magnetic detector (95, fig. 13, 14) having a connection terminal (96); at least one main terminal (97) connected with the connection terminal (96) of the magnetic detector (95), the at least one main terminal (67) including a connection portion; and a holder member (65) for holding the magnetic detector (95) and the connection portion of the respective main terminal (96), wherein the magnetic detector (95), the main terminals (97) and the holder member (65) are formed into an assembly to be structured as a sensor assembly, further wherein a potting material member (epoxy [0086]) is positioned within the holding member (65) to encapsulate at least a portion of the sensor assembly (Fig. 13 and 14).

As to claims 2 and 19, Hagio discloses that the connection terminal (61a – 61c, 62a – 62c, 96, fig. 9 and 14) of the magnetic detector (61, 62, 95) and the main terminal (63, 97) are connected by welding [0081].

As to claims 3 and 20, Hagio discloses that the holder member (65, 100) is provided with a guiding portion for guiding the magnetic detector (61, 62) to a predetermined assembled position.

As to claims 4 and 21, Hagio discloses that a potting material (epoxy, [0086]) is positioned in the holder member (65) so as to cover the magnetic detector (61, 62) and the connection portion between the connection terminal (61a – 61c, 62a – 62c) of the magnetic detector (61, 62) and the main terminal (63).

As to claim 10, Hagio discloses that the magnetic detectors (95) are housed in the holder member (65) such that a bottom surface within the holder member is formed in a predetermined spaced relationship to the contour shape of the magnetic detector facing the bottom surface.

As to claim 11, Hagio discloses that the assembly is insert molded with subterminals (96), which are connected to the main terminal (97) and connectable with terminal pins of an external connector (87).

Allowable Subject Matter

Claims 5 – 9 and 12 - 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 5 - 9, the prior art fails to disclose that the rotational angle sensor is provided further comprising a capacitor as a preventive measure for discharge of positive charges, wherein the capacitor is connected to the main terminal and covered with the potting material. These features taken together with the other limitations of the claims renders the claims allowable over prior art.

As to claims 12 - 14, the prior art fails to disclose that the holder member includes sidewalls, which is provided with a reinforcing ribs for inhibiting deformation of the sidewalls caused by molding pressure when the resin molded body is resin molded. These features taken together with the other limitations of the claims renders the claims allowable over prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Reena Aurora
/Reena Aurora/
Primary Examiner, Art Unit 2858

